

FIELD EXPERIMENT HISTORY

Exp. Number: 10 Herbicide* Hybrid Maturity **Year:** 1997
Title: Hybrid Maturity and Herbicide Effects on Corn
Personnel: J.G. Lauer, C.M. Boerboom, K.D. Kohn, P.J. Flannery, K.D. Hudelson, and H.M. Darby
Location: Arlington Research Station, Arlington, WI
Supported by: Hatch

FIELD INFORMATION

Field: 397
Soil Type: Plano Silt Loam
Soil Test Results: Test Date: 10/97 pH: 6.3 P (ppm): 62 K (ppm): 24[†] O.M. 3.5 %
Tillage Operations: None
Fertilizer: 24- April 150 lbs N/A 46-0-0
12- May 150 lbs/A 6-24-24 starter
Herbicide: Pre-treated with Dual/Bladex
Previous Crop: Soybean
Irrigation: None

EXPERIMENTAL PROCEDURE

Exp. Design: RCB-Split
Replicates: 3
Variables: 7 Treatments: Untreated check
Banvel - 1 pt. @ 6-8 inches
Banvel - 1 pt. @ 14-16 inches
Basis - 1/3 oz. @ V2
Basis - 1/3 oz. @ V4
Accent - 2/3 oz. @ V5
Accent - 2/3 oz. @ V9
14 Hybrids:
Cargill 809 (80 day) NK N2409 (90 day)
Carharts CX1100A (110 day) Pioneer 3417 (110 day)
DeKalb DK352 (85 day) Pioneer 3578 (105 day)
DeKalb DK471 (95 day) Pioneer 3769 (95 day)
DeKalb DK493 (100 day) Pioneer 3902 (90 day)
Golden Harvest H2387 (100 day) Pioneer 3921 (85 day)
Golden Harvest H2441 (105 day) Pioneer 3936 (80 day)

Row Spacing: 30"
Planting Date: 12-May
Area Planted: 5' x 25'
Planting Equip: Kinze Plot Planter w/seed cones
Date Harvested: 5-Nov
Area Harvested: 5' x25'
Harvesting Equip: Kincaid Plot Combine

Results: Table E-41.

**Table E-41. Hybrid Maturity and Herbicide Effects on Corn
Arlington, WI - 1997**

Treatment	Hybrid	RM	Broken Stalks %	Yield bu/A	Moisture %	Test Weight lbs/bu
	Cargill 809	80	11.0	134.9	20.8	54
	Carharts CX1100A	110	5.1	148.0	31.6	51
	DeKalb DK352	85	11.1	128.4	20.1	57
	DeKalb DK471	95	3.8	182.4	26.4	53
	DeKalb DK493	100	5.1	171.2	26.4	53
	Golden Harvest H2387	100	11.6	173.8	28.7	53
	Golden Harvest H2441	105	9.4	156.2	31.7	52
	NK N2409	90	3.3	147.0	23.4	57
	Pioneer 3417	110	12.3	135.3	31.9	51
	Pioneer 3578	105	8.4	169.4	31.4	52
	Pioneer 3769	95	8.5	157.9	26.2	53
	Pioneer 3902	90	9.0	146.5	22.7	58
	Pioneer 3921	85	10.5	136.2	23.0	59
	Pioneer 3936	80	11.5	130.1	20.9	57
Accent (V5) @ 2/3 oz/A		110	4.0	159.4	25.8	55
Accent (V9) @ 2/3 oz/A		110	4.6	143.8	26.2	55
Banvel (6- 8 in) @ 1 pt/A		110	3.9	157.5	25.6	54
Banvel (14-16 in) @ 1 pt/A		110	33.7	131.1	26.6	55
Basis (V2) @ 1/3 oz/A		110	5.8	162.3	26.3	55
Basis (V4) @ 1/3 oz/A		110	4.9	146.1	25.4	52
Untreated		110	3.5	158.5	26.8	54
Accent (V5) @ 2/3 oz/A	Cargill 809	80	3.2	149.1	21.9	57
Accent (V5) @ 2/3 oz/A	Carharts CX1100A	110	4.3	163.2	32.3	53
Accent (V5) @ 2/3 oz/A	DeKalb DK352	85	1.6	133.2	18.8	57
Accent (V5) @ 2/3 oz/A	DeKalb DK471	95	4.3	185.0	25.5	53
Accent (V5) @ 2/3 oz/A	DeKalb DK493	100	1.1	184.9	24.9	54
Accent (V5) @ 2/3 oz/A	Golden Harvest H2387	100	6.4	181.3	27.9	53
Accent (V5) @ 2/3 oz/A	Golden Harvest H2441	105	4.3	168.4	31.5	52
Accent (V5) @ 2/3 oz/A	NK N2409	90	2.7	135.9	23.5	58
Accent (V5) @ 2/3 oz/A	Pioneer 3417	110	14.4	136.6	33.1	53
Accent (V5) @ 2/3 oz/A	Pioneer 3578	105	4.3	195.8	30.6	52
Accent (V5) @ 2/3 oz/A	Pioneer 3769	95	1.1	171.4	25.3	54
Accent (V5) @ 2/3 oz/A	Pioneer 3902	90	1.1	162.6	21.6	58
Accent (V5) @ 2/3 oz/A	Pioneer 3921	85	1.1	134.5	23.2	59
Accent (V5) @ 2/3 oz/A	Pioneer 3936	80	6.4	130.1	20.6	58

continued

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Treatment	Hybrid	RM	Broken Stalks %	Yield bu/A	Moisture %	Test Weight lbs/bu
Accent (V9) @ 2/3 oz/A	Cargill 809	80	7.0	141.3	22.3	56
Accent (V9) @ 2/3 oz/A	Carharts CX1100A	110	5.4	151.7	32.4	53
Accent (V9) @ 2/3 oz/A	DeKalb DK352	85	2.1	125.9	19.9	56
Accent (V9) @ 2/3 oz/A	DeKalb DK471	95	2.7	163.3	26.5	53
Accent (V9) @ 2/3 oz/A	DeKalb DK493	100	3.7	166.1	26.2	53
Accent (V9) @ 2/3 oz/A	Golden Harvest H2387	100	3.7	182.8	26.9	54
Accent (V9) @ 2/3 oz/A	Golden Harvest H2441	105	4.8	145.0	31.1	52
Accent (V9) @ 2/3 oz/A	NK N2409	90	4.3	134.2	22.9	58
Accent (V9) @ 2/3 oz/A	Pioneer 3417	110	18.2	107.5	34.2	53
Accent (V9) @ 2/3 oz/A	Pioneer 3578	105	2.7	155.0	30.9	52
Accent (V9) @ 2/3 oz/A	Pioneer 3769	95	1.6	139.0	26.8	53
Accent (V9) @ 2/3 oz/A	Pioneer 3902	90	0.5	141.6	22.4	57
Accent (V9) @ 2/3 oz/A	Pioneer 3921	85	6.4	126.9	23.3	59
Accent (V9) @ 2/3 oz/A	Pioneer 3936	80	1.1	133.7	21.3	58
Banvel (6- 8 in) @ 1 pt/A	Cargill 809	80	8.6	116.3	14.5	37
Banvel (6- 8 in) @ 1 pt/A	Carharts CX1100A	110	5.4	153.0	34.2	56
Banvel (6- 8 in) @ 1 pt/A	DeKalb DK352	85	2.1	113.3	20.0	57
Banvel (6- 8 in) @ 1 pt/A	DeKalb DK471	95	2.7	193.2	25.8	52
Banvel (6- 8 in) @ 1 pt/A	DeKalb DK493	100	2.7	175.3	25.7	53
Banvel (6- 8 in) @ 1 pt/A	Golden Harvest H2387	100	3.2	183.7	27.5	53
Banvel (6- 8 in) @ 1 pt/A	Golden Harvest H2441	105	2.1	169.8	31.2	51
Banvel (6- 8 in) @ 1 pt/A	NK N2409	90	2.1	172.5	23.2	59
Banvel (6- 8 in) @ 1 pt/A	Pioneer 3417	110	9.6	172.6	33.8	57
Banvel (6- 8 in) @ 1 pt/A	Pioneer 3578	105	2.1	179.1	30.9	52
Banvel (6- 8 in) @ 1 pt/A	Pioneer 3769	95	1.6	149.9	26.0	54
Banvel (6- 8 in) @ 1 pt/A	Pioneer 3902	90	2.7	152.1	22.4	57
Banvel (6- 8 in) @ 1 pt/A	Pioneer 3921	85	5.4	132.5	22.8	57
Banvel (6- 8 in) @ 1 pt/A	Pioneer 3936	80	4.8	142.6	20.1	58
Banvel (14-16 in) @ 1 pt/A	Cargill 809	80	34.2	112.9	21.6	57
Banvel (14-16 in) @ 1 pt/A	Carharts CX1100A	110	8.6	144.8	33.2	53
Banvel (14-16 in) @ 1 pt/A	DeKalb DK352	85	65.8	98.3	20.4	56
Banvel (14-16 in) @ 1 pt/A	DeKalb DK471	95	5.9	184.8	25.2	53
Banvel (14-16 in) @ 1 pt/A	DeKalb DK493	100	10.7	167.1	26.7	53
Banvel (14-16 in) @ 1 pt/A	Golden Harvest H2387	100	54.0	116.1	29.9	52
Banvel (14-16 in) @ 1 pt/A	Golden Harvest H2441	105	39.1	136.1	33.0	52
Banvel (14-16 in) @ 1 pt/A	NK N2409	90	6.4	141.3	24.4	58
Banvel (14-16 in) @ 1 pt/A	Pioneer 3417	110	12.3	142.7	32.4	53
Banvel (14-16 in) @ 1 pt/A	Pioneer 3578	105	43.9	138.4	33.2	52
Banvel (14-16 in) @ 1 pt/A	Pioneer 3769	95	34.8	151.5	24.8	54
Banvel (14-16 in) @ 1 pt/A	Pioneer 3902	90	51.9	103.5	24.1	56

continued

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Banvel (14-16 in) @ 1 pt/A	Pioneer 3921	85	54.0	104.5	22.7	59
Banvel (14-16 in) @ 1 pt/A	Pioneer 3936	80	50.3	93.8	20.3	57
Basis (V2) @ 1/3 oz/A	Cargill 809	80	8.0	153.7	21.7	57
Basis (V2) @ 1/3 oz/A	Carharts CX1100A	110	5.9	157.5	33.7	52
Basis (V2) @ 1/3 oz/A	DeKalb DK352	85	1.6	143.0	20.3	57
Basis (V2) @ 1/3 oz/A	DeKalb DK471	95	3.7	187.2	27.7	53
Basis (V2) @ 1/3 oz/A	DeKalb DK493	100	5.4	169.5	26.6	53
Basis (V2) @ 1/3 oz/A	Golden Harvest H2387	100	4.3	202.2	28.5	53
Basis (V2) @ 1/3 oz/A	Golden Harvest H2441	105	7.5	153.0	31.1	52
Basis (V2) @ 1/3 oz/A	NK N2409	90	4.3	152.9	22.8	56
Basis (V2) @ 1/3 oz/A	Pioneer 3417	110	13.9	137.3	34.0	53
Basis (V2) @ 1/3 oz/A	Pioneer 3578	105	2.1	190.0	29.4	52
Basis (V2) @ 1/3 oz/A	Pioneer 3769	95	15.0	171.7	26.0	53
Basis (V2) @ 1/3 oz/A	Pioneer 3902	90	2.1	152.9	22.4	58
Basis (V2) @ 1/3 oz/A	Pioneer 3921	85	1.6	152.4	22.9	59
Basis (V2) @ 1/3 oz/A	Pioneer 3936	80	5.4	148.3	21.2	58
Basis (V4) @ 1/3 oz/A	Cargill 809	80	9.6	126.9	22.7	55
Basis (V4) @ 1/3 oz/A	Carharts CX1100A	110	2.7	100.4	22.6	35
Basis (V4) @ 1/3 oz/A	DeKalb DK352	85	2.1	143.7	20.5	58
Basis (V4) @ 1/3 oz/A	DeKalb DK471	95	3.2	182.3	27.3	53
Basis (V4) @ 1/3 oz/A	DeKalb DK493	100	9.1	167.4	26.8	53
Basis (V4) @ 1/3 oz/A	Golden Harvest H2387	100	5.9	178.6	29.4	52
Basis (V4) @ 1/3 oz/A	Golden Harvest H2441	105	5.9	164.8	31.1	52
Basis (V4) @ 1/3 oz/A	NK N2409	90	1.6	148.9	24.3	57
Basis (V4) @ 1/3 oz/A	Pioneer 3417	110	11.2	100.2	22.7	35
Basis (V4) @ 1/3 oz/A	Pioneer 3578	105	1.6	170.4	31.8	52
Basis (V4) @ 1/3 oz/A	Pioneer 3769	95	1.1	156.5	27.2	53
Basis (V4) @ 1/3 oz/A	Pioneer 3902	90	3.2	150.0	23.2	57
Basis (V4) @ 1/3 oz/A	Pioneer 3921	85	2.1	143.7	23.8	59
Basis (V4) @ 1/3 oz/A	Pioneer 3936	80	8.6	111.2	22.1	55
Untreated	Cargill 809	80	6.4	144.3	21.0	56
Untreated	Carharts CX1100A	110	3.7	165.9	33.1	52
Untreated	DeKalb DK352	85	2.1	141.3	20.8	57
Untreated	DeKalb DK471	95	4.3	181.1	26.8	52
Untreated	DeKalb DK493	100	3.2	168.2	28.1	52
Untreated	Golden Harvest H2387	100	3.7	172.2	30.9	52
Untreated	Golden Harvest H2441	105	2.1	156.2	33.3	51
Untreated	NK N2409	90	1.6	143.5	23.1	55

continued

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Treatment	Hybrid	RM	Broken Stalks %	Yield bu/A	Moisture %	Test Weight lbs/bu
Untreated	Pioneer 3417	110	6.4	150.0	33.0	53
Untreated	Pioneer 3578	105	2.1	157.4	32.9	51
Untreated	Pioneer 3769	95	4.3	165.2	27.0	53
Untreated	Pioneer 3902	90	1.6	163.1	22.4	59
Untreated	Pioneer 3921	85	2.7	159.0	22.6	59
Untreated	Pioneer 3936	80	4.3	151.2	20.6	58
Mean			8.6	151.2	26.1	54
<u>Probability(%)</u>						
Hybrid (H)			0.0	0.0	0.0	0
Treatment (T)			0.0	0.0	44.0	10
H X T			0.0	20.0	42.8	25
<u>LSD(0.10)</u>						
Hybrid (H)			3.7	11.9	1.7	3
Treatment (T)			2.7	8.4	NS	NS
<u>CV(%)</u>						
			86	16	13	10